Implementing the NASA CRuSR Program. M. G. Skidmore[1], D. C. Maclise[2], Y. D.Cagle[3], R. C.Mains[4], L.Chu-Thielbar[5], [1]NASA Ames Research Center (NASA ARC, MS240-10, Moffett Field, CA 94035_Mike.Skidmore@nasa.gov) , [2]NASA ARC (Douglas.C.Maclise@nasa.gov), [3]NASA ARC (Yvonne.D.Cagle@nasa.gov), [4]Mains Assoc. (rmains@mainsgate.com), [5]SETI Inst. (Lisa.Chu-Thielbar@nasa.gov).

Introduction: With the advent of a new class of Commercial Reusable Suborbital spacecraft, NASA is developing a new program to respond to policy guidance and to facilitate access to "Near-Space" by NASA-sponsored researchers, engineers, technologists, and educators. The goal of the Commercial Reusable Suborbital Research Program (CRuSR) is regular, frequent, and predictable access to the edge of space at a reasonable cost with easy recovery of intact payloads.

Background: Extensive guidance concerning Commercial Space has been delivered by Congress:

- 1958 National Aeronautics and Space Act
- Commercial Space Act of 1998
- NASA Authorization Act of 2005
- NASA Authorization Act of 2008

And the White House:

- White House Space Policy (2004)
- White House Space Transportation Policy (2006)

Goals: The CRuSR Program has been developed to respond to the guidance referenced above and intends to implement this guidance in the following specific ways:

- Educate the scientific and technological (user) community about the opportunities presented by this new access to space
- Facilitate user access to Near-Space through the emerging Commercial Reusable Suborbital community
- Work with FAA and other regulatory agencies to achieve safe and effective access to Near-Space
- Facilitate the operations of a commercial payload integration industry that will work to move experiments safely and effectively from the laboratory onto Near-Space platforms
- Work to transfer NASA technologies and processes critical to the transition of experiments from laboratories onto Near-Space platforms
- Work with established spaceports to encourage commercial activities that facilitate the growth of suborbital space research
- Work with government (DoD & other agencies) and industry to leverage resources across the R&D community to develop access to Near-Space
- Work with the government's administrative infrastructure to define strategies and approaches that will facilitate research access to Near-Space
- Engage the education community to integrate their expertise and creativity into Near-Space research so that the integration of Scientific, Technical, Engineering, and Mathematical (STEM) educational assets and Near-Space are mutually beneficial and self sustaining
- Facilitate the development of an open interactive website where:
  - the research community can exchange information and ideas to facilitate development of an active and knowledgeable user community
  - the launch provider community can share information to develop common community responses to items of interest, develop standard payload interfaces, and communicate capabilities to potential users
  - the broader Near-Space community (launch providers, users, service providers, & government) can exchange information and develop innovative collaborations

The CRuSR Program is soliciting input from the user, provider, regulatory, and commercial infrastructure communities so that it may better support the utilization and development of a robust and vibrant Near-Space community.